DEVELOPMENT REVIEW BOARD REPORT



MEETING DATE: June 23, 2005 ITEM No. <u>7</u>

CASE NUMBER/ 34-DR-2005

PROJECT NAME Coronado High School

LOCATION 2501 N 74th Street

REQUEST Request approval for remodel and additions to the existing Coronado High

School facility.

OWNER Scottsdale Unified N/A

School/District Building

602-852-2008 c/o Frank Corder

ARCHITECT/ DLR Group 480-484-6100 APPLICANT/ COORDINATOR DLR Group 602-381-8580

BACKGROUND Zoning.

The subject property is currently zoned R1-7, Single Family Residential. This zone district is intended to promote and preserve urban single-family residential development. Public elementary and high schools are permitted uses in the R1-7 zone district.

Context.

The site is generally described as being bounded by Miller Road on the east, East Virginia Avenue on the north, East Oak Street on the south, and North 74th Street on the west.

Adjacent Uses:

- North: R1-7 Single Family residential.
- South: R1-7 Single Family residential.
- East: R1-7 Single Family residential, R-5 Multi-family residential and Open Space (Indian Bend Wash).
- West: R1-7 Single Family residential.

APPLICANT'S PROPOSAL

Applicant's Request.

The Scottsdale Unified School District will be reconstructing the Coronado High School on the existing campus. Proposed as a master-planned project, the phased construction and demolition is expected to be completed within a two-and-one-half (2-½) year period beginning in the summer of 2005. According to the project narrative (**Attachment 1**), the reconstruction of the high school campus is being done as part of the School District's comprehensive program to improve traffic circulation, update buildings to current codes, increase energy efficiency, lower operating costs, and accommodate changing enrollment

patterns:

Divided into two (2) phases, the proposal includes:

- ✓ A new two-story classroom/administration/media center building (approximately 155,800 sq. ft.).
- ✓ New cafeteria /visual arts building (approximately 23,800 sq. ft.).
- ✓ Remodeled gymnasium/music building (approximately 53,000 sq. ft.).
- ✓ New auditorium/performing arts building (approximately 52,000 sq. ft.).
- ✓ Remodeled auxiliary gymnasium/central plant (approximately 21,100 sq. ft.).
- ✓ Three new restroom/field-house buildings (approximately 4000 sq. ft. combined).
- ✓ Reconfigured athletic fields that will be open to general public use.

Development Information:

Existing Use: High School
Proposed Use: High School
Parcel Size: 40.2 acres

Building Size (total): Approximately 307,900 sq.ft.
 Building Height Allowed/Proposed: 30 feet/55 feet (auditorium)
 Parking Required/Provided: 250 spaces/450 spaces

Open Space Required/Provided: Not applicable
 FAR: Not applicable
 Number of Units:* Not applicable
 Density:* Not applicable

*For Residential Only

DISCUSSION

Review Procedures

In accordance with the standing agreement between the City of Scottsdale and School District. applications the Scottsdale Unified for major improvements/renovations at the various campuses are brought to the Development Review Board for consideration prior to commencement of improvements. Treated as an allowed use in all residential zone districts within the City of Scottsdale, public schools generally observe the basic zoning district standards such as setbacks from adjacent streets, height, lighting and parking. While these campuses are typically secure facilities, under the ultimate control of the State, and not subject to City of Scottsdale plan review, fees, inspections, etc., the District has considered the City of Scottsdale design and development guidelines, and where practical, has applied those policies to this project (landscaping, southwestern style architecture, lighting, etc.).

While maximum height for buildings in the R1-7 zone district is thirty-feet (30), certain exemptions are allowed. In accordance with Article VII-General Provisions of the Zoning Ordinance, additional building height up to one-hundred (100) feet is allowed for chimneys, church steeples, cooling towers, elevator bulkheads, monuments, stacks, stage towers or scenery lifts, tanks, water towers and grain elevators. The fifty-five (55) feet of height associated with this request is related to the auditorium fly-loft for stage lighting and equipment (Attachments 1 & 7).

Analysis

The design for the Coronado High School campus renovation/reconstruction organizes the buildings around an exterior courtyard setting, which will function as the focal point of the campus (**Attachment 7**). According to the project narrative, this assignment of buildings will also lend itself to a controlled environment for security purposes as well as creating active and passive areas for student interaction with the facility. Two story classrooms will enclose the courtyard to the east, north and south facilitating an organized separation of curriculum functions while maintaining a very efficient distribution of uses.

The narrative states that the exterior character and materials of the new buildings will be contextually compatible and respective of the diversity of the Coronado Heights neighborhood, while providing a contemporary relationship with the revitalization efforts in the area such as the ASUF/City of Scottsdale center at Scottsdale Road and East McDowell Road. Smooth and split-face exterior masonry veneer, three-coat cement plaster, stucco accents and steel beams are the primary construction materials. Regionally appropriate colors have also been chosen for the project. (**Attachment 7**).

Minor public improvements are anticipated as part of this proposal. New driveway entrances will be located on Miller Road, Oak Street and Virginia Avenue (Attachment 4). A new deceleration lane is anticipated along Miller Road for southbound traffic entering the east side of the campus. The District has included a traffic study for consideration by the City of Scottsdale's Public Works Division who will ultimately approve the design and construction of said improvement.

The majority of the open space within the campus has been assigned to the athletic fields along 74th Street (baseball, football and tennis) and Oak Street (tennis, football, track and field). Generous front open space tracts have been proposed along Virginia Avenue and Miller Road to provide buffers from staff/student parking and buildings.

STAFF RECOMMENDATION

Staff finds the proposal is in keeping with the City's goals for the revitalization of the South Scottsdale area and is supportive of the proposal.

STAFF CONTACT(S)

Richard Goecke Principal Planner Phone: 480-312-7872

E-mail: rgoecke@ScottsdaleAZ.gov

Scottsdale Development Review Board Report

Case No. 34-DR-2005

APPROVED BY

Richard Goecke Report Author

Lusia Galav, AICP

(4512

Development Planning Manager

Phone: 480-312-2506

E-mail: lgalav@scottsdaleAZ.gov

ATTACHMENTS

I. Applicant's Narrative

2. Context Aerial

2A. Aerial Close-Up

3. Zoning Maps

4. Site Plan

5. Phasing Plan

6. Landscape Plan

7. Elevations

8. Open Space Worksheet

Scottsdale Unified School District No. 48

DESIGN REVIEW BOARD NARRATIVE

Project Description and Phasing Timeline

- A. The **new Coronado High School** for the Scottsdale Unified School District will be primarily reconstructed on the existing campus, in a masterplanned and phased sequence of new construction and demolition for completion over a 2.5-year period through 2 primary construction phases. The new campus is designed to complement the existing school's existing curriculum, a projected enrollment expansion, and the Scottsdale Unified School District's facility standards, which were updated by the District in concert with the Planning and Predesign Phase for the new school. The approximately **307,850 square foot facility** is designed to accommodate **1,500 students** in grades 9 through 12, and is comprised of the following buildings:
 - New two-story Classroom / Administration / Media Center Building of approximately 155,820 SF, containing all core-curriculum classrooms and Career and Technical Education classrooms;
 - 2. New Cafeteria / Visual Arts Building of approximately 23,820 SF;
 - 3. Remodeled Competition Gym / Music Building of approximately 52,090 SF;
 - 4. New Auditorium / Performing Arts / Life Skills Building of approximately 51,970 SF;
 - 5. Remodeled Auxiliary Gym / Central Plant / Maintenance Building of approximately 21,040 SF;
 - 6. Three Restroom / Concession buildings (fieldhouses), with a total of approximately 4,000 S.F. One is at the west end of the football stadium to serve both home team and visitor fans, one is at the varsity baseball field, and one is at the softball field complex that will be developed at the east side of the Sierra Vista Academy on the south side of Oak Street, across from the Coronado High School football stadium.
- B. The reconstruction of the high school campus is being done as part of the School District's comprehensive facility master plan that provides for the accomplishment of the following District-wide objectives:
 - 1. Increase student safety and security.

DLR Project No. 30-05106-10

- 2. Improve traffic circulation and parking.
- 3. Eliminate existing building / life safety code violations.
- 4. Comply with ADA accessibility standards.
- 5. Comply with Title IX equal opportunity requirements.
- 6. Accommodate changing student enrollment.
- 7. Improve the quality of learning environments for student achievement.
- 8. Provide facilities that fully support rather than limit the educational programs offered to students.
- 9. Increase energy efficiency and lower operating and maintenance costs, saving in annual operational funds that can be redirected to educational purposes.
- 10. Reduce ongoing facility repair costs avoiding additional capital expenditures over the next 10 years.
- 11. Extend the life and lower the life-cycle cost of the school facilities.
- 12. Provide equity and equal opportunity across the District.
- 13. Exceed the minimum Adequacy Guidelines set forth by the State of Arizona School Facilities Board.
- Provide for Community use of the athletic fields and courts, the Auditorium and the Gymnasiums.

Scottsdale Unified School District No. 48

- 15. Comply with City of Scottsdale Land-Use Ordinances and Building / Fire Codes, to the greatest extend permissible with respect to budget and security concerns.
- C. Phase 1 of the master-plan will include the following demolition, new buildings and sitework, as shown on the phasing photo-perspectives at the end of this section:
 - Demolition of existing baseball and practice football fields, tennis courts and concrete-wall handball courts, between June, 2005 and July, 2005.
 - 2. Construction of the following facilities between July, 2005 and July, 2006:
 - Two-story classroom building;
 - Administration offices (single-story building attached to the classroom building);
 - Media Center (single-story within the classroom building);
 - Central Plant and Maintenance area addition to the Auxiliary Gymnasium building. Existing gym will remain and be remodeled in Phase 2.
 - Site development including landscaped main courtyard with amphitheater, new vehicular and bus access, new visitor and staff parking lots on Virginia Avenue and Miller Road, and new fieldhouse at the west end of the football stadium.
 - 3. Reconstruction of existing softball fields at Sierra Vista Academy, and construction of new fieldhouse, as a new Girls Athletic Complex for Coronado High School, between September, 2005 and January, 2006.
 - 4. Demolition of the existing north and south classroom buildings (after occupancy of the new buildings) between June, 2006 and July, 2006.
 - 5. Demolition of existing Auditorium / Arts Building and Cafeteria / Kitchen Building (after temporary relocation of Arts and dining functions into remaining existing buildings) between August, 2006 and September, 2006.
- D. Phase 2 completion of the campus will include the following demolition, remaining building construction and sitework, as shown on the phasing photo-perspectives at the end of this section:
 - Demolition of the existing student parking and adjacent softball field, and construction of new student parking lot, between August, 2006 and September, 2006.
 - 2. Construction of the following facilities between October, 2006 and July, 2007:
 - New Cafeteria / Kitchen / Visual Arts classrooms building;
 - New Auditorium / Performing Arts / Life Skills building;
 - Remodel of the existing Competition and Auxiliary Gymnasiums, including construction of new locker rooms, Music and P.E. classrooms, lobby, restrooms, weight and wrestling rooms;
 - Remodel of existing football stadium field and track; construction of relocated athletic fields / tennis and basketball courts, fieldhouse at baseball field and related sitework.
 - 3. Demolition of the 2 remaining existing Classroom / Media Center buildings, between June, 2007 and July, 2007.
 - 4. Remainder of athletic fields to be completed by August, 2007.

Existing Campus Conditions

A. The existing Coronado High School campus is located in the existing Coronado Heights residential community in Scottsdale, Arizona, bordered on the west by 74th Street, on the north by Virginia Avenue, on the south by Oak Street, and by Miller Road on the east. The primary vehicular access onto the site will be from Virginia Avenue (for staff, public /

Scottsdale Unified School District No. 48

visitors and emergency vehicles), Miller Road (for school buses, staff and emergency vehicles) and Oak Street (for students).

- 1. The gross acreage for the site is approximately 40.2 acres and net acreage for the site is 36.1 acres, with the difference being in the public right-of-way.
- 2. There are major underground water, sewer, gas, electric and telecommunication lines running through the west portion of the campus where the existing buildings are located, primarily in a concrete utility tunnel.
- 3. SRP electric service is available on power poles in the right-of-way along Miller Road. The main electrical feed into the campus extends underground north of the football stadium, from Miller Road to the existing SES at the Central Plant.
- B. Miller Road, 74th Street, Oak Street and Virginia Avenue are all two lane, raised pavement streets with curb, gutter and sidewalk along each side. A traffic light controls the intersection of Oak Street and Miller Road, and 4-way stop signs at the intersection of Oak Street and 74th Street. There are multiple existing driveway entrances into the parking lots along 74th Street and Virginia Avenue.
 - 1. An existing southbound City bus stop is located on the west side of Miller Road, south of Virginia Avenue.
 - The School District's Sierra Vista Academy is located on the south side of Oak Street, across from the football stadium.
 - 3. Residences are located west of the Academy, and along the west side of 74th Street and the north side of Virginia Avenue.
 - 4. A Boys and Girls Club facility is located on the east side of Miller Road across from the football stadium.
 - 5. Multi-family housing is located north of the Boys and Girls Club, and Eldorado Park is located on the south side.
- C. The existing campus layout has all buildings and parking lots located on the west half of the site, and the athletic courts and ballfields located on the east half, as follows:
 - 1. The 4 classroom buildings, which also contain the Administrative Center and Media Center, are aligned on the east side of the visitor parking lot, which extends north-south along 74th Street, and is accessible from 3 driveway entrances.
 - 2. The staff parking lots are located at the northwest corner of the campus and at the north side of the Auditorium complex, accessible from driveway entrances on Virginia Avenue only.
 - 3. The student parking lot is located at the southwest corner of the campus, south of the visitor parking lot, with driveway entrances on both 74th Street and Oak Street. Although the student lot contains approximately 260 spaces, the Principal verified that it is never more than 75% filled (approximately 200 spaces).
 - 4. The main student / staff circulation spine is an exterior concrete-paved courtyard that extends north-to-south along the east side of the classroom buildings. The courtyard separates the classroom buildings from the Nurses Office, Special Needs classrooms, Auditorium, Performing Arts and Visual Arts classrooms, Cafeteria, Competition and Auxiliary Gymnasiums, and the Central Plant, which are all located on the east side of the courtyard.
 - 5. Eight tennis courts are located at the northeast corner of the campus, arranged side-by-side along Virginia Avenue; the football stadium is located at the southwest corner of the campus, with an east-west orientation along Oak Street. Concrete grandstands are located on the north and south sides of the stadium, with the home-team grandstand (with press box) on the north side because of its closer proximity to restrooms at the Auxiliary Gym.

Scottsdale Unified School District No. 48

- 6. Between the tennis courts and football stadium are located the soccer field, baseball fields, and the walled handball courts located just north of the stadium adjacent to Miller Road. Two softball fields overlay the soccer field.
- 7. The south softball field on the Sierra Vista Academy campus is also used by the Coronado High School team.
- 8. Basketball courts are located between the west end of the stadium and the Auxiliary Gym. An additional baseball field is located between the west end of the stadium and the student parking lot.
- 9. Below the main courtyard are underground concrete-structured, accessible utility tunnels which connect all buildings to the Central Plant's mechanical and electrical systems.
- 10. Fencing encloses the entire campus along Miller Road and Oak Street, and extends around the student parking lot and the tennis courts to connect up with the buildings. The visitor and staff parking lots are unfenced and open to 74th Street and Virginia Avenue. Fencing also extends between buildings, and the north end of the main courtyard is fenced off between the auditorium complex and the north classroom building.
- 11. As a result of the existing athletic fields being flood irrigated, the east half of the site is graded approximately 5 feet lower in elevation than the west half, between the tennis courts and the football stadium. The Auxiliary Gym is the only building with its floor elevation lowered to the approximate elevation of the athletic fields.

Design Approach

- A. The new Coronado High School campus design organizes the buildings around an exterior Courtyard, which functions as the gathering and circulation space of the school. Locating the administrative office area and Cafeteria dining patio to face the Courtyard, allows student / staff interaction and supervision of students as they move about the campus.
 - 1. The axis of circulation through the lobby of the Administration building serves as the primary public and visitor entry to the campus. This entry axis intersects the Courtyard with other inter-building circulation paths that also connect with an amphitheater adjacent to the Administration building and the covered dining patio.
 - 2. Larger paved walkways through the interior of the courtyard will guide the heavier volumes of pedestrian traffic to all activities of the campus. These pathways will also serve as emergency access to areas of refuge away from the buildings. Informal unpaved walkways on the edges of the courtyard shall provide smaller and passive social areas for students and administration.
 - 3. Open areas and seat walls will provide outdoor teaching and gathering spaces. The overall design of the courtyard will organize and reinforce the functional relationships of the buildings.
- B. The campus organization lends itself to a controlled environment for security purposes. The primary secured entry points for the public and visitors are given visual and physical control by the placement of the reception area within the lobby of the Administration building.
 - 1. All exterior areas will be protected by a security lighting system and surveillance cameras as described in the electrical narrative.

34-DR-2005 Page 4 REV: 5/31/2005

Scottsdale Unified School District No. 48

- C. Fencing between the buildings provides a clearly defined and secured campus perimeter with limited access / egress points from the visitor / staff parking lots on the north, and from the student parking lots on the south.
 - Except for the staff and visitor parking lots along Virginia Avenue, the perimeter of the school campus will be enclosed with no less than new 6-foot-high chain-link fencing to control access, if the existing perimeter fence is not able to be reused. A minimum of 6-foot-high ornamental iron fencing will be provided between the buildings to control access to the interior of the campus and the courtyard.
- D. The campus layout arranges the 2-story classroom building to enclose the Courtyard on its east, north and south sides. The circulation Courtyard helps to separate the classroom building from the Gymnasium buildings, the Cafeteria building, the Auditorium / Performing Arts building, and the Special Needs and vocational education classrooms, to create "passive" and "active" areas. The campus layout also facilitates an organized separation of curriculum functions while maintaining a very efficient distribution of those functions.
- E. The campus is designed to engage the activities of educators and students, staff, community members and parents in the following variety of settings, while providing everyone with a 'sense of place.'
 - 1. The community-at-large is provided with easy access to the campus facilities, adequate parking for events, and shared use by the community of the High School's Auditorium, Lecture Hall, Gymnasiums, athletic fields and courts.
 - 2. The Auditorium, and outside amphitheater in the Courtyard, given their location and easy public access from the main parking lot and streets, will accommodate large performance activities within the community. The large Lecture Hall, also with easy access from the parking lot and streets, will facilitate special-occasion speaking events and classes without requiring the Media Center to provide space for those functions.
 - 3. The Cafeteria with its "scramble"-type servery, in conjunction with the 4 exterior "satellite" snack bars, will provide food service for the maximum number of students during the single lunch period being considered by the School District. To maximize an interior / exterior dining connection, the Cafeteria opens out to a north and east facing covered dining patio and student gathering space. While fostering social interaction, it will also enable full supervision of students both indoors and outdoors.
- F. The exterior character / materials of the new buildings will be contextually compatible and respective of the diversity of the Coronado Heights neighborhood, yet be contemporarily compatible with the planned ASU-Los Arcos upgrades.
 - 1. The need to expedite the Phase 1 construction schedule of the 2-story classroom building prompted the Architect/Engineer design and Construction Management team to decide on the following building systems and materials, making it efficient to construct, and cost effective as a result.
 - Steel-frame structural system, in lieu of load-bearing masonry, with non-load-bearing metal stud exterior walls.
 - Smooth and split-face exterior masonry veneer supported on the 1st floor level of the metal studs.
 - Cement plaster system (stucco) over sheathing on the 2nd floor level of the metal studs.
 - 2. The Phase 2 buildings will be primarily constructed of load-bearing concrete masonry, in a combination of both smooth and split-face, with stucco accents.

Scottsdale Unified School District No. 48

- G. The history and tradition of Coronado High School are being integrated into the design for the new campus by the following strategies and directives, as requested by SUSD and the Coronado High School Building / Design Committee:
 - Commemorative displays of archived information, realia and artifacts, both within the buildings at daily-used circulation areas and areas of public use, and exterior courtyards.
 - 2. The new Media Center roof will replicate the saw-tooth roof form that exists on the Competition Gym building (which will remain) and the Auditorium building (which will be demolished). While the existing saw-tooth roof forms are constructed of concrete, the new Media Center saw-tooth roof form will be constructed of steel frame and metal panels.
 - Relocation of the large existing ceramic-mosaic mural from the exterior entry wall of the existing Auditorium, to the exterior wall adjacent to the entry of the new Auditorium.
 - 4. Using a representation of the school's icon-symbol, the 'shield with crossed axes', as a large cast metal or concrete plaque on one of the exterior walls flanking the glass wall of the Media Center, fronting Miller Road.
 - 5. Reuse and/or relocation of the student-donated letters spelling out the school's name, currently located at the exterior and top of the south wall of the Competition Gym.
- H. The School District directed that the design of the new campus incorporate as many components of a High-Performance School as is practical within the building's design and budget, for the sake of energy efficiency / conservation, user comfort and safety, improved curriculum delivery and student achievement, life-cycle cost savings to campus maintenance and operation and reduced environmental impacts. The characteristics listed below for a High-Performance School, accomplish many of the following Green Building and Sustainability design objectives in the national standards of Leadership in Energy and Environmental Design (LEED). However, while it is the District's intent to work as closely as possible to the LEED guidelines, certification for a specific level of compliance is considered an optional requirement.
 - 1. Health and Indoor Air Quality
 - Zero VOC paints, adhesives, sealants and coatings
 - Non-toxic cleaning materials
 - Demand control ventilation
 - Construction waste management
 - Construction IAQ management (during construction and/or before occupancy)
 - Formaldehyde-free fiberglass thermal and acoustical insulation
 - Displacement ventilation / HVAC system
 - Thermal Comfort
 - · High efficiency glazing / placement of windows
 - High R-value insulation in walls and roof
 - Cool roof coating
 - Energy management system
 - Exterior shaded areas to provide microclimate tempering
 - Shading devices over windows / doors
 - 3. Visual Comfort
 - Natural daylighting view windows / clerestories
 - Lighting (direct / indirect fixtures)
 - Light selves above windows

Scottsdale Unified School District No. 48

- 4. Acoustic Comfort
 - Acoustic insulation in walls and penetrations
 - Acoustic dampening of HVAC equipment at curbs and in ductwork
- 5. Security and Safety
 - · Layout of buildings to minimize "hidden" areas
 - Heavy-duty vandal-resistant hardware
- 6. Ecosystem Protection
 - Surface water collection
 - Stormwater / groundwater management
 - Non-CFC based refrigerants
 - Rainwater harvesting
 - Gray water systems
- 7. Energy Efficiency
 - High-efficiency central plant HVAC system
 - CO₂ sensors
 - Occupancy sensors to turn off light fixtures
 - Water heater controls
 - VFD's on pumps
 - Water side economizer
 - T-8 lamps in fixtures
 - Daylight sensors to lower light fixture illumination
 - Harmonic mitigation dry type transformers
 - Fixed-plate heat recovery
 - Air-side economizers
 - On-demand heat
 - Photovoltaics
 - Heat wheel recovery
 - Thermal storage
- 8. Water Efficiency
 - · Low flow fixtures
 - Waterless urinals
 - Xeriscape
 - Irrigation technology to turn on / off heads by moisture sensing
 - Dual flush water closets in staff restrooms
 - Infrared faucets (staff restroom only)
 - Bleed-off from cooling tower for irrigation
- 9. Materials Efficiency
 - Recycled backing carpet
 - Natural flooring products (Marmoleum, sealed concrete)
 - Demolition building material recycling
 - Masonry and steel construction
 - Impact resistant drywall
 - Non-fading and cleanable paints
 - Local materials
 - Wheatboard for casework
- 10. Buildings as a Teaching Tool
 - Exposed building systems (shielded with Lexan / glass)

Scottsdale Unified School District No. 48

- Electric power load monitoring system
- Photovoltaic integration (physical / curriculum based integration)

Note:

- Items above in **bold** are being incorporated into the design.
- Items above in *italics* will be considered for incorporation into the design pending budget verification.
- Items not in bold or italics will most likely not be able to be incorporated.
- 1. To ensure community consensus with the planned design and consistency with the intentions of the Bond program, the following reviews were provided for approval and comment, and incorporation of those comments into the campus design:
 - Fourteen Design Committee meeting held on a weekly basis, from January through May. The Committee members comprised teachers and administrative staff from the high school, parents, student and community members.
 - 2. Building Committee tour of existing high schools with design aspects relevant to the new Coronado High School.
 - 3. Meetings with the Bond Oversight Committee on March 10 and May 19.
 - 4. Meetings with the SUSD Governing Board on March 29 and May 24.
 - 5. Presentations of the schematic design to the Community, Staff and Students, held in the Coronado High School Media Center on March 23.
 - 6. Communications with neighborhood and parents will be on-going.

Land Use Ordinance Requirements

- A. The on-site paving, parking, fire services, landscape, lighting, site access and other improvements will comply with the City of Scottsdale Land Use and Zoning Ordinance, Americans with Disabilities Act, Uniform Fire Code, A.D.E.Q., Maricopa County Department of Environmental Services and other governing authorities that have jurisdiction at the site. Zoning Ordinance requirements include:
 - 1. Land Use Zone R1-7: Public schools, elementary and high, are permitted uses;
 - 2. Height Regulations: **30 feet** or 2 stories. As defined in the Land Use Ordinance, the base level of the 30 ft. height begins at one foot above the average height of the curb on the south side of Virginia Ave., along the length of curb that only fronts the building;
 - 3. Yard Setbacks: 20-foot Front yard at Miller Road and Virginia Avenue, 25-foot Rear yard at Oak Street and 74th Street; (5-foot Side yards with 14 ft. aggregate: Not Applicable).
 - 4. Parking Requirements:
 - School Use: 1 space per 6 students (based on projected maximum enrollment) plus 1 space for each employee. 1500 students ÷ 6 = 250 spaces; 200 total teachers and maintenance / administrative staff. Total required parking: 450 spaces.
 - Space Size: Minimum 9 ft. wide x 18 ft. long.
 - Mobility-Impaired Accessible Car Spaces: 4% of required number of parking spaces, and 1 van accessible space for every 8 accessible car spaces.
 - 5. Open Space Requirements:
 - First 12 feet of height = Net Lot Area x 10%
 - Next 43 feet of height (based on the 55-foot high fly-loft) = Net Lot Area x 4/10 of 1% of each foot of height above 12 feet.
 - See site plans for calculated actual open space provided.

Scottsdale Unified School District No. 48

Building Height Compliance

- A. As required by the City of Scottsdale Land Use Ordinance, maximum building height in an R1-7 zone is 30 feet. Exceptions to this height limit, as stated in Section 7.10, Article VIII of the Municipal Code, permit entities such as the Scottsdale Unified School District to exceed the 30-foot height requirement for the following:
 - 1. Stage towers or scenery lifts.
 - 2. Necessary mechanical appurtenances, and the screening required for the appurtenances, provided that both the appurtenances and screening not cover as an aggregate amount more than 50% of the entire roof area.
- B. Section 7.101(B) of the Municipal Code establishes that for every 2 feet of additional height above the 30-foot limit, one foot of additional yard setback is required from the adjacent right-of-way (R.O.W.).
- C. To the greatest extend possible, building heights will comply with the criteria noted above while still providing for all roof-top mounted mechanical equipment to be visually screened to the height of the tallest unit.
- D. At the two-story classroom building that runs parallel with Miller Road on the east side of the campus, the top of the parapet walls facing Miller Road and Virginia Avenue will exceed the height limit by approximately one and a half feet. The top of the parapet walls facing the south parking lot will exceed the height limit by approximately 3 feet.
 - 1. This additional height is in order to screen exhaust fans mounted on the roof, as permitted by exception A.2 above.
 - 2. While the total setback required from the Miller Road and Virginia Avenue R.O.W.s will therefore be 21 feet (20 ft. front yard plus 1 additional foot for the extra parapet height), the actual setback provided is 23.3 feet at Miller Road, and 180 feet at Virginia Avenue.
- E. At the Auditorium building, the fly-loft above the performance stage will have parapet heights of approximately 55 feet above the stage floor, which is at grade level. This additional height is permitted by the exception described in A.1 above.
 - 1. For the additional 25 feet of height above the 30 foot limit, an additional 12.5 feet of yard setback is required. Thus, the total setback required from the Virginia Avenue R.O.W. will be 32.5 feet (20 + 12.5).
 - 2. The actual setback provided is approximately 181 feet.

Site Lighting Compliance

- A. The exterior site lighting for the new campus will be designed with a higher quality level than the existing campus lighting, while providing a sense of safety and security, by reducing excessive light levels, light trespass and glare, to comply with the following design principles and requirements in the City's Land Use / Lighting Ordinance:
 - Lighting will be integrally designed as part of the built environment and will balance
 the lighting needs of the campus with the contextual ambient light level and
 nighttime characteristics of the surrounding community.
 - 2. Light level guidelines and uniformity ratios will be as recommended by the Illumination Engineering Society of North America (IESNA), in the IESNA Lighting Handbook.
 - The maintained maximum and average maintained horizontal illuminance at grade shall not exceed 10 and 2.5, respectively.

Scottsdale Unified School District No. 48

- The initial vertical illuminance (maximum spill directly out of the property) at 6 feet above grade around the entire property line shall not exceed 1.5 foot candles.
- 3. The lighting design will minimize glare and light trespass, provide energy conservation, maintain dark skies, and incorporate automatic controls systems to eliminate excessive light during nonactive hours of site and building operation.
 - All metal halide lamps will be filtered by glass, acrylic, or translucent enclosures.
 - No lighting of one hundred fifty (150) watts or greater will be used after 11:00 p.m.
- 4. Full cut-off fixtures, mounting heights, and shielding will be utilized to control glare and light trespass.
 - Every effort has been made to comply with the 20-foot height limitation of fixtures. However, parking lot pole fixtures are 25 feet high in an effort to avoid hot spots and provide more uniform lighting. This requires fewer poles, and reduces energy costs.
 - Except for lighting at the athletic fields, no fixture or illumination source shall be mounted higher than 20 feet, and no individual lamp shall exceed 250 watts.
 - All fixtures and associated hardware, including poles, shall be flat or dark bronze.
- 5. Exterior lighting designs will take into account all exterior lighting sources.
- 6. Architectural lighting will only be utilized to highlight special building features. Lighting of expansive wall plane, stage towers, and roofs will be avoided.
- 7. Landscape lighting will only be utilized to accent landscaping, point away from the property line, and use fixtures with extension shields to minimize glare and light source visibility.
 - Landscape lighting will be low-voltage type and will not be used to illuminate the building.
- 8. Lighting control will be accomplished through relay panels such as those manufactured by Douglas Lighting Controls. The types of input into the control system includes photocells, astronomical timeclocks and low voltage switching inside. This will allow the Site lighting to be turned off during the day when not required, as well as programmed to be off for seasonal requirements.

Offsite Improvements and Conditions

DLR Project No. 30-05106-10

- A. Off-site improvements such as new curb, gutter, sidewalk and street-lights are not expected to be required by the City of Scottsdale along Miller Road, Oak Street, Virginia Avenue or 74th Street, except where existing driveway entrances are removed and new entrances constructed. New driveway entrances onto Miller Road, Oak Street and Virginia Avenue will be asphalt radius entrances with on-site curb and gutter terminating at the right-of-way lines.
- B. The City of Scottsdale has required that a traffic study be provided by a traffic engineer-consultant for the School District, to verify the anticipated traffic loads on Miller Road, Oak Street and Virginia Avenue during typical school days, and for special events such as football games. A new deceleration lane is anticipated on Miller Road at the entrance to the bus lane and staff parking. The exact length of the striped asphalt-paved deceleration lane will be specified in the traffic study.
- C. There is an existing long storm drain gutter inlet at the location of the new Miller Road driveway entrance. This inlet structure will need to be reconstructed and lengthened in order to maintain the existing inlet capacity, and will be located in the valley gutter that will be constructed as part of the deceleration lane.

REV: 5/31/2005

Scottsdale Unified School District No. 48

Athletic Fields and Courts

- A. The new baseball fields and athletic courts are orientated in the optimal directions for competition play. However, the competition soccer / football practice field is oriented in the same east to west direction as the existing football field to help reinforce the actual playing conditions that will be encountered on the stadium field. This field will serve mainly as a practice field for the organized sports of football and soccer, as well as for Band practice activities. A walkway will provide direct pedestrian and emergency access from both the school and parking lots to all the fields and to the outdoor fieldhouses (each with a concession stand and restrooms). Hybrid Bermuda grass is designated for the baseball and softball fields.
- B. The football stadium's existing home team grandstand (with press box) and visitor team grandstand will remain without upgrades. Discus, pole vault, high jump and long jump facilities will be provided in the end zone areas. A shot put facility will be provided on the north side of the field, east of the home team bleachers. The existing track will be resurfaced as an 8-lane 400-meter all-weather, synthetic surface to provide an optimal competition-ready surface. The football field will have its turf replaced with new Bermuda grass.
- C. As agreed to by the Coronado High School coaching staff and SUSD Facilities Staff, both varsity and JV softball fields will be developed as a Girls Athletic Complex on the existing Sierra Vista Academy campus, by upgrading the 2 existing fields and constructing a new fieldhouse with restrooms and concession stand.
- D. The competition level baseball and softball fields will each be provided with bleachers seating 150 at the varsity fields and 50 at the JV fields. An electronic scoreboard is provided at each varsity field. Each field will be equipped with solid wall and solid roof dugouts with aluminum benches, pitching bullpens and batting cages.
- E. In accordance with the School District's Facility Standards, Field and Court sizes are as follows:
 - 1. Existing Football: 360' x 160'
 - 2. Soccer / Football Practice: 360' x 160'
 - 3. Varsity Baseball: 300' 375' 300'
 - JV Baseball: 300'
 - 5. Varsity and JV Softball: 200' / 180'
 - 6. Tennis Courts: 8 each at 60' x 120', which includes the area around each court.
 - 7. Basketball / Volleyball (combination courts): 3 each at 50' x 84'

Bus Drop-off and Parking

- A. The high school regular student bus drop-off is located at a student entrance on the south side of the 2-story classroom building, to separate it from the student and visitor parking traffic. However, the bus lane loops around a supplemental "staff" parking lot, and will mix with the staff's cars at the driveway entrance at Miller Road.
 - 1. The school anticipates that no more than 3 full-size buses will be needed, as the majority of students walk, bike or drive to school. Buses will make only right-in / right-out turns at the Miller Road driveway.
- B. The drop-off for the Special Needs students buses is located on the north side of the Special Needs classrooms, with access from and to Virginia Avenue.

Scottsdale Unified School District No. 48

- C. Direct walkway circulation routes will allow the students both easy and safe access to and from the school to the buses without interference of other vehicular traffic in the parking lots.
- D. The parking lots will be designed to serve the adequate number of vehicles for teaching and administrative staff, public and student parking throughout the day. The south parking lots will also accommodate larger sporting events and have direct access to the fields. The student parking will be on the south side of the school to provide separation of the different parking uses and a single entry point on Oak Street for the student population.
 - 1. The small lot within the bus loop at the south side of the classroom building, will serve as both overflow staff parking and after hours event use of the athletic facilities.
 - 2. Convenient drop-off areas will be provided at both the front of school for visitors and staff, and in the student parking lot for the students.
 - 3. Event parking for the softball fields developed on the Sierra Vista Academy will be accommodated in their existing parking lot on Oak Street.
- E. Parking spaces as required by School District Facilities Standards are as follows:

	Required Parking Spaces per 100 students (1500 students total)	Approximate Parking Spaces Provided	
		North Lot	South Lot
Administration & Teaching Staff	11 spaces x 15 = 165	96 ⁽²⁾	66 ⁽¹⁾
Students	28 spaces x 15 = 420 (3)		290 (1) (3)
Visitors	4 spaces x 15 = 60	168 (2)	
TOTALS	645	620 (4)	

- (1) Will also be used for athletic games on fields and in gyms.
- (2) Will also be used for staff, performances and special school events.
- (3) Actual number of spaces in the existing High School parking lot is 260; actual number of students that park at the existing High School is approximately 200, as verified by the High School based on the actual number of parking permits that they issue.
- (4) Total of 620 parking spaces provided > 450 spaces required by the City of Scottsdale.
- F. Typical asphalt pavement sections in the parking lots will require 2" 4" asphalt pavement on 6" 8" A.B.C. All concrete pavement, fire lanes and other site-surface structures will be per recommendations of the soils investigation report.

Scottsdale Unified School District No. 48

Landscape and Irrigation

- The School District has made every effort to comply with City of Scottsdale standards for plant selection, and landscape requirements, however the District must also comply with the mandate set forth by the Arizona Department of Water Resources.
- B. With the exception of the sports fields and some areas within the courtyard. Turf areas have been consolidated in the courtyard around the amphitheater. This results in a considerable reduction in total turf area as compared to the existing campus. The plant palette will consist of indigenous and land water use plant types. Most compositions of trees, shrubs, cacti and groundcover will be concentrated around the buildings and central courtyard. The compositions of these plantings shall be designed to naturally cool outdoor people spaces and to accent and complement both the architecture of the building and the context of the surrounding landscape.
- C. Some shade trees will be placed near walkways to soften the hardscape and create comfort and protection from climatic conditions. There will also be approximately 5 shrubs per every tree. Larger shrubs will be planted for buffers and screens. Small decorative trees will be used around the entrance and passive spaces. Hybrid Bermuda grass and shade trees will be used around the athletic fields.
- D. Trees will also be located in the parking lot islands for shading of vehicles, in compliance with City of Scottsdale site development standards for a minimum of 15% of all parking lot areas to be landscaped.
- E. Large shade trees will be planted on both the exterior and interior of the parking lots to help cool the pavement and cars.
 - One-third of the required landscaped area for the parking lots shall be in planting areas distributed throughout the lots rather than on the perimeter.
 - 2. Planting areas shall have a minimum width of 7 feet and a minimum area of 120 square feet. Such landscape island shall be required between every 15 parking
 - Total parking lot landscape required will be a minimum of 15% of the parking lot 3. area.
- All trees and shrubs will be drip irrigated for efficient water dispersal and utilization. Rotor sprinkler heads will irrigate the fields at 100% full and even, head-to-head coverage. Valves will be grouped in certain areas for maintenance personnel to access irrigation zones efficiently.

Grading and Storm Drainage Improvements

- The existing site generally slopes from the west to the east, with storm drainage retained on the playfields. No significant off-site runoff contributes to this site.
- The finish grades of the new campus will be stepped from west to east to take advantage of the existing site conditions and minimize the extent of site grading. The finished floor of Phase One will be approximately 24 inches above the existing playfield, 24 inches above the top of curb of Miller Road and 6 inches above the finished floor of the Auxiliary Gym. We anticipate the Phase Two buildings to be at or close to the elevations of the existing Main Gym and Cafeteria. This being the case, there will be a 36-inch vertical difference between the upper and lower portions of the campus. This vertical separation should lend itself to a functional and aesthetically pleasing "break" in the campus hardscape.

DLR Project No. 30-05106-10

Scottsdale Unified School District No. 48

C. In accordance with direction given by Bill Erickson, storm water engineer with the City of Scottsdale, all storm runoff from the hard-scape portions of the campus may be drained into the existing storm drain systems in Miller Road and Oak Street. This concept will require the installation of an onsite storm drain system and may require the school to upgrade some offsite storm drain facilities in order to make the required connections. The exact onsite configuration and points of connection to the city system will be determined following video inspection of the existing systems and further coordination with Bill Erickson.

With the exception of the grass playfields, no onsite retention will be provided. (The play fields will be self-retaining.)

Water and Waste Water Improvements

- A. A new 8-inch water loop will be constructed through the site in order to provide adequate water pressure and volume for the fire hydrants and building fire sprinklers. There is an 18-inch water transmission main located in Oak Street. This main also runs north from Oak Street along the east side of Miller Road to Murray Street. The other surrounding streets have 6-inch and 8-inch water lines. The new 8-inch onsite water line will run west from the Miller / Murray intersection, turning north at the west edge of the teacher parking area and running under the fire lane between Phase One and Phase Two. At a point north of the 2-story Classroom Building, the line will split with one leg running east and tying into the existing 8-inch line in Miller Road. (This "loop" will satisfy the flow demands for Phase One.) As part of Phase Two, the remaining leg will run west along the north side of the auditorium and then back south along the west side of the building complex connecting to the existing 18-inch main in Oak Street. This will be a public system and must be place in a 20-foot-wide exclusive water line easement in parking lots, drives or the fire lane. No other underground utilities may be placed in the water line easement, but will need to be carefully located alongside the easement to fit within the underground area between the Phase One buildings.
- The onsite sewer system will connect to the existing 8-inch sewer line in Oak Street. The 8-inch onsite sewer will run along the west end of the football field, turn east at the access road and then north at a point east of the practice gym, and then running north near or under the fire lane between the Phase One courtyard and Phase Two buildings. If it is determined that it is not possible to connect at Oak Street due to adverse grades, the City has agreed to allow the school to connect to the existing 21-inch sewer line in Miller Road at an existing manhole.

DLR Project No. 30-05106-10

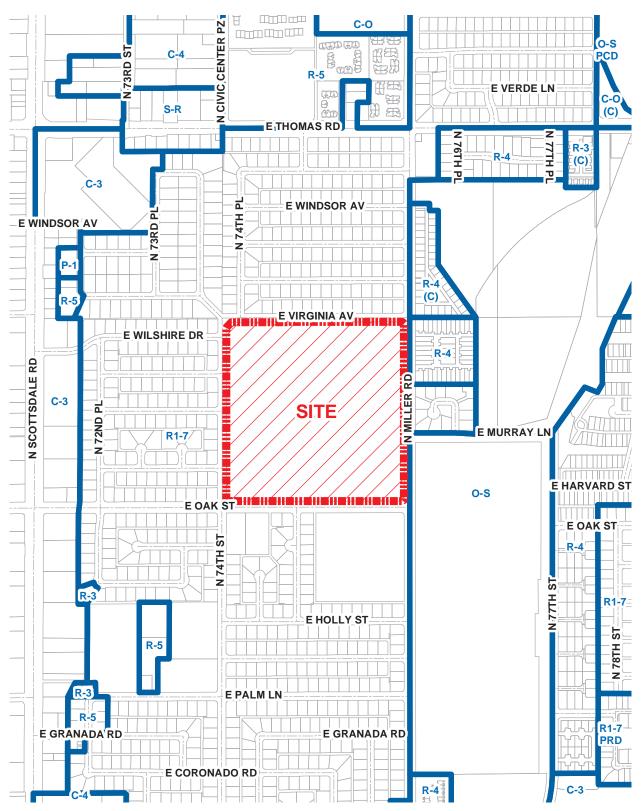


Coronado High School

34-DR-2005

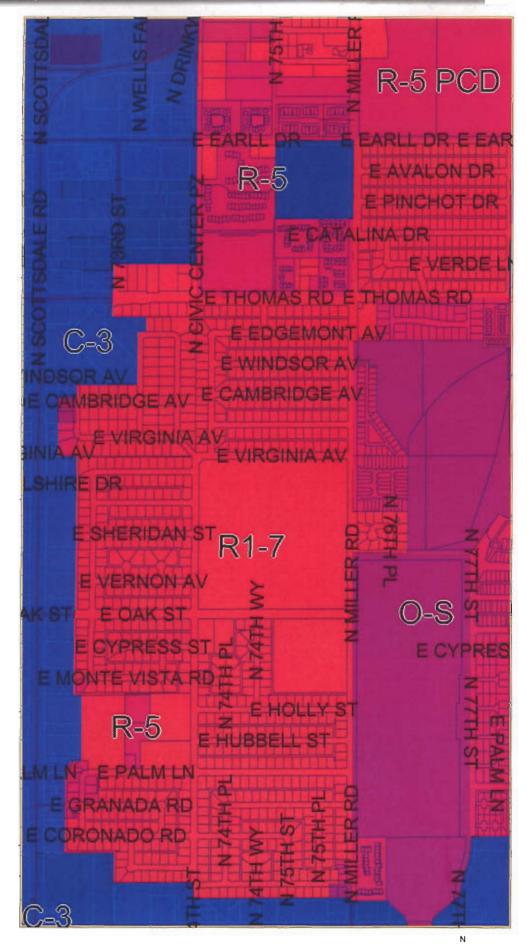


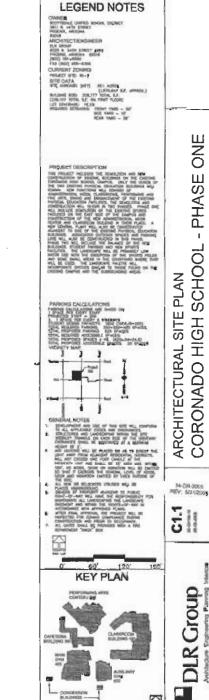
Coronado High School



34-DR-2005

W





perts.

0

0

PATRICI

ONE - PHASE ARCHITECTURAL SITE PLAN CORONADO HIGH SCHOOL - P DESIGN REVIEW BOARD SUBMITTAL



Existing Campus



Phase 1 June 2005 to July 2006



Phase 1 June 2006 to September 2006



Phase 2 October 2006 to July 2007



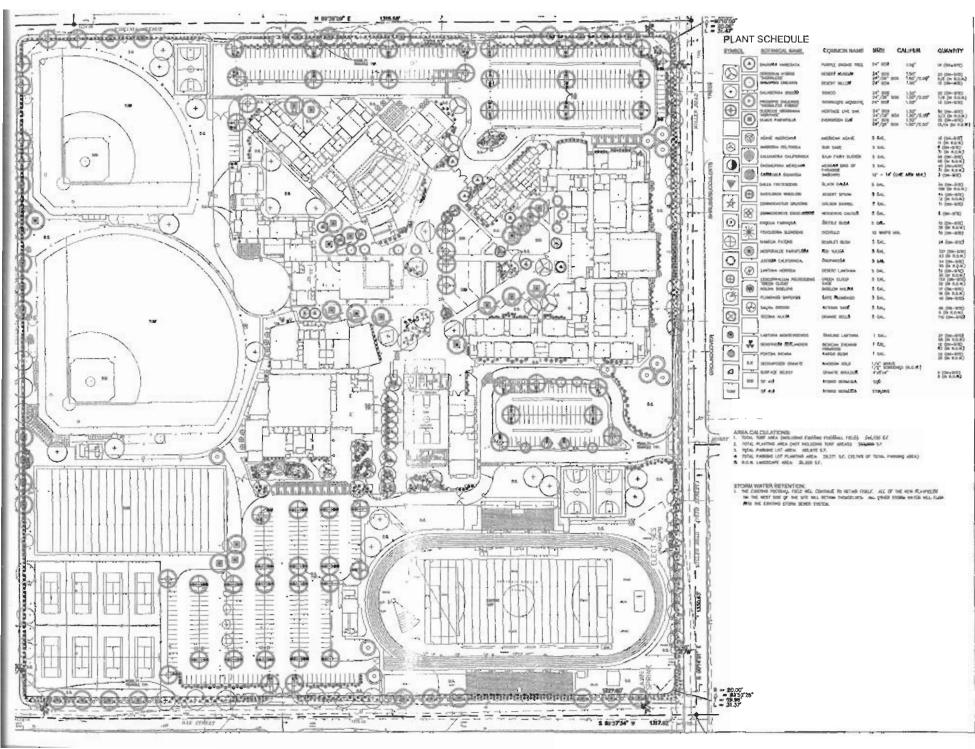
Phase 2 June 2007 to July 2007

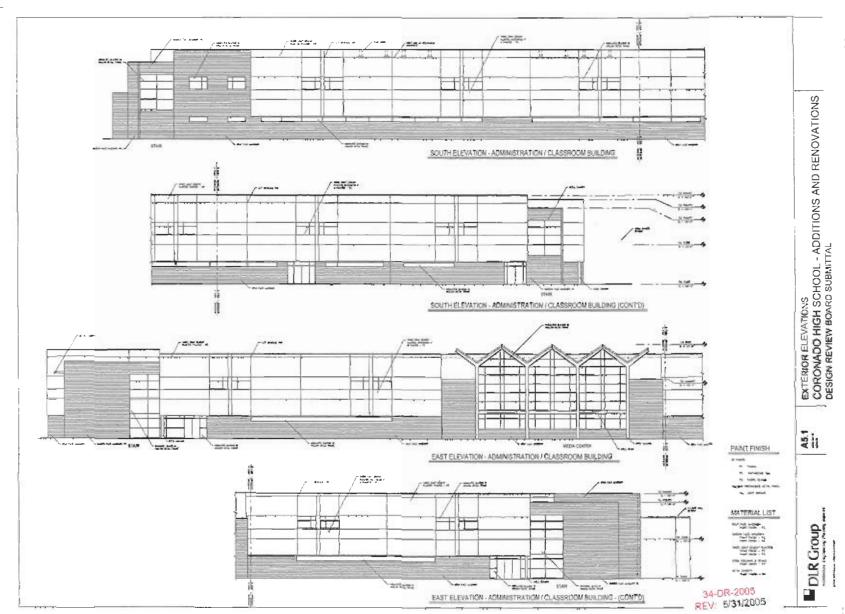


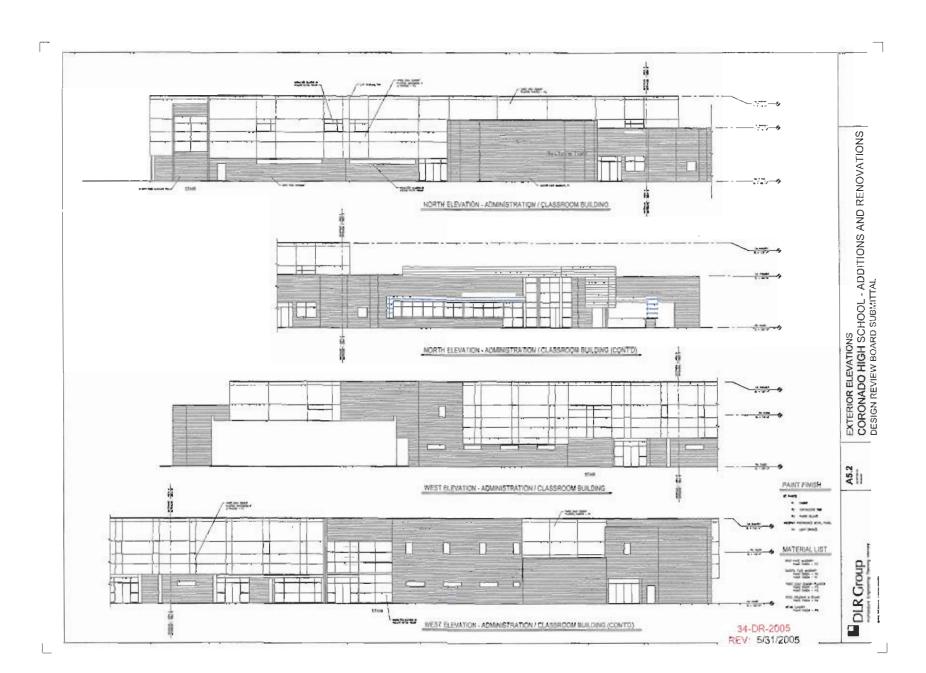
Completed New Campus
August 2007

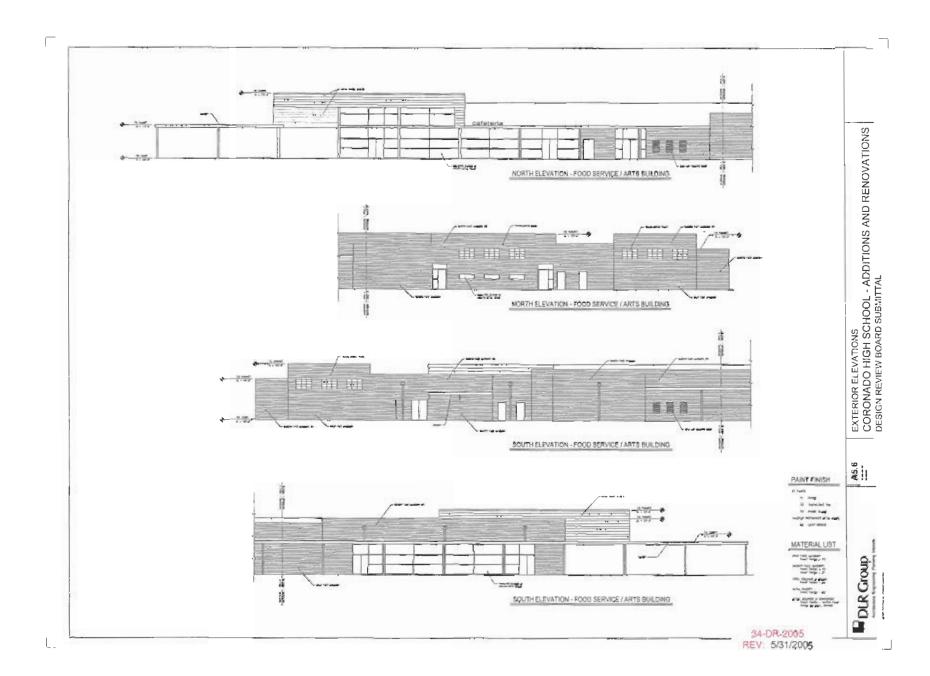


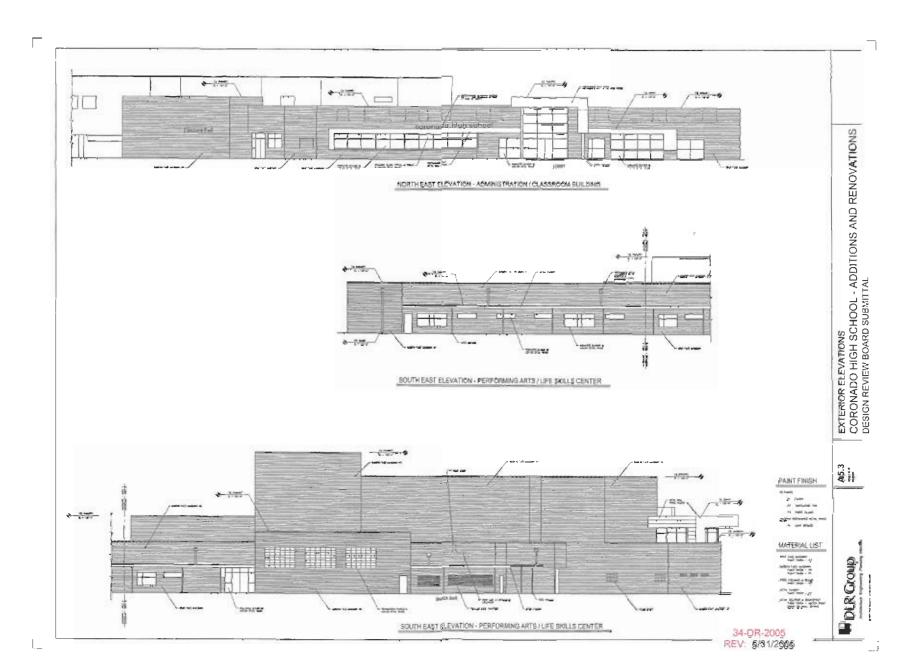


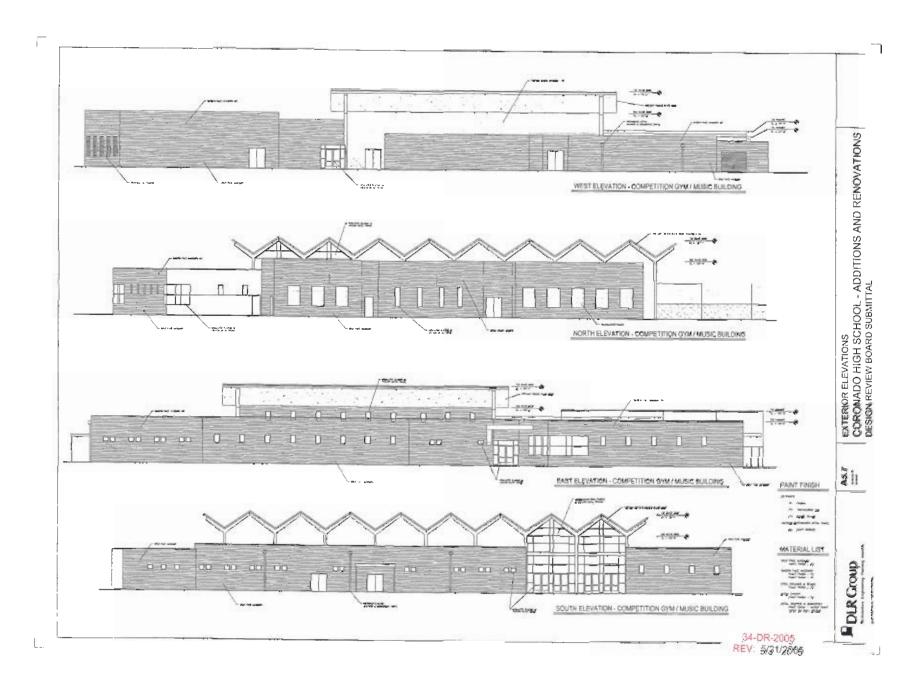












LEGEND NOTES

THE PERFORM THE THICK BUT U. WHY.

